

New Jersey Preschool Teaching and Learning Mathematics Standards Aligned to the Common Core Mathematics Standards for Kindergarten

New Jersey Preschool Teaching and Learning Standards: Mathematics		Kindergarten Common Core Standards: Mathematics	
NJ Preschool Standard 4.1: Children begin to demonstrate an understanding of number and counting.		Kindergarten Common Core: Counting and Cardinality (K.CC.)	
KNOW NUMBER NAMES AND THE COUNT SEQUENCE			
4.1.1	Count to 20 by ones with minimal prompting.	K.CC.1	Count to 100 by ones and by tens.
4.1.2	Recognize and name one-digit written numbers up to 10 with minimal prompting.	K.CC.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
4.1.3	Know that written numbers are symbols for number quantities and, with support, begin to write numbers from 0 to 10.	K.CC.3	Write numbers from 0 to 10. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
COUNT TO TELL THE NUMBER OF OBJECTS			
4.1.4	<p>Understand the relationship between numbers and quantities (i.e., the last word stated when counting tells “how many”):</p> <p>(a) Count quantities of objects up to 10, using one-to-one-correspondence, and accurately count as many as 5 objects in a scattered configuration.</p> <p>(b) Arrange and count different kinds of objects to demonstrate understanding of the consistency of quantities (i.e. “5” is constant, whether it is a group of 5 people, 5 blocks or 5 pencils).</p> <p>(c) Instantly recognize, without counting, small</p>	K.CC.4	<p>Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.</p> <p>b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>c. Understand that each successive number name refers to a quantity that is one larger.</p>

	quantities of up to 3 objects (i.e., subitize).		
4.1.5	Use one to one correspondence to solve problems by matching sets (e.g., getting just enough straws to distribute for each juice container on the table) and comparing amounts (e.g., counting the number of openings in a muffin tin and then filling the openings with one cube each).	K.CC.5	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.
COMPARE NUMBERS			
4.1.6	Compare groups of up to 5 objects (e.g., beginning to use terms such as “more,” “less,” “same”).	K.CC.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g. by using matching and counting strategies.
	intentionally blank	K.CC.7	Compare two numbers between 1 and 10 presented as written numerals.
NJ Preschool Standard 4.2: Children demonstrate an initial understanding of numerical operations.		Kindergarten Common Core: Operations and Algebraic Thinking (K.OA.)	
UNDERSTAND ADDITION AS PUTTING TOGETHER AND ADDING TO, AND UNDERSTAND SUBTRACTION AS TAKING APART AND TAKING FROM			
4.2.1	Represent addition and subtraction by manipulating up to 5 objects: (a) putting together and adding to (e.g., “3 blue pegs, 2 yellow pegs, 5 pegs altogether.”); and (b) taking apart and taking from (“I have 4 carrot sticks. I’m eating one. Now I have 3.”).	K.OA.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations.
4.2.2	Begin to represent simple addition and subtraction word problem data in pictures and drawings.	K.OA.2	Solve addition and subtraction and word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
	intentionally blank	K.OA.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5=2+3 and 5=4+1).
	intentionally blank	K.OA.4	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., record the answer with a drawing or equation.

	intentionally blank	K.OA.5	Fluently add and subtract within 5.
intentionally blank		Kindergarten Common Core: Numbers and Operations in Base Ten (NBT)	
WORK WITH NUMBERS 11-19 TO GAIN FOUNDATIONS FOR PLACE VALUE			
	intentionally blank	K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18=10+8); understand that these numbers are composed of ten ones and one, two, three four, five, six, seven, eight, or nine ones.
New Jersey Preschool Teaching and Learning Standards: Mathematics		Kindergarten Common Core Standards: Mathematics	
NJ Preschool Standard 4.3: Children begin to conceptualize measurable attributes of objects.		Kindergarten Common Core: Measurement and Data	
DESCRIBE AND COMPARE MEASURABLE ATTRIBUTES			
4.3.2	Begin to use accurate vocabulary to demonstrate awareness of the measurable attributes of length, area, weight, and capacity of everyday objects (e.g., long, short, tall, light, heavy, full).	K.MD.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
4.3.3	Compare (e.g., which container holds more) and order (e.g., shortest to longest) up to 5 objects according to measurable attributes.	K.MD.2	Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
CLASSIFY OBJECTS AND COUNT THE NUMBER OF OBJECTS IN EACH CATEGORY			
4.3.1	Sort, order, pattern, and classify objects by non-measurable (e.g., color, texture, type of material) and measurable attributes (e.g., length, capacity, height).	K.MD.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to ten.
NJ Preschool Standard 4.4: Children develop spatial and geometric sense.		Kindergarten Common Core: Geometry (G)	
IDENTIFY AND DESCRIBE SHAPES (SQUARES, CIRCLES, TRIANGLES, RECTANGLES, HEXAGONS, CUBES, CONES, CYLINDERS, AND SPHERES)			
4.4.1	Respond to and use positional words (e.g., in, under, between,	K.G.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.

	down, behind).		
4.4.2	Use accurate terms to name and describe some two-dimensional shapes and begin to use accurate terms to name and describe some three-dimensional shapes (e.g., circle, square, triangle, sphere, cylinder, cube, side point, angle).	K.G.2	Correctly name shapes regardless of their orientations or overall size.
	intentionally blank	K.G.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three dimensional (“solid”).
ANALYZE, COMPARE, CREATE, AND COMPOSE SHAPES			
4.4.3	Manipulate, compare and discuss the attributes of: (a) two-dimensional shapes (e.g., use two dimensional shapes to make designs, patterns and pictures by manipulating materials such as paper shapes, puzzle pieces, tangrams; construct shapes from materials such as straws; match identical shapes; sort shapes based on rules [something that makes them alike/different]; describe shapes by sides/angles; use pattern blocks to compose/decompose shapes when making and taking apart compositions of several shapes).	K.G.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).
	Manipulate, compare and discuss the attributes of: (b) three-dimensional shapes by building with blocks and with other materials having height, width and depth (e.g., unit blocks, hollow blocks, attribute blocks, boxes, empty food containers, plastic pipe).	K.G.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

	intentionally blank	K.G.6	Compose simple shapes to form larger shapes. For example, <i>“Can you join these two triangles with full sides touching to make a rectangle?”</i>